

Fig.1

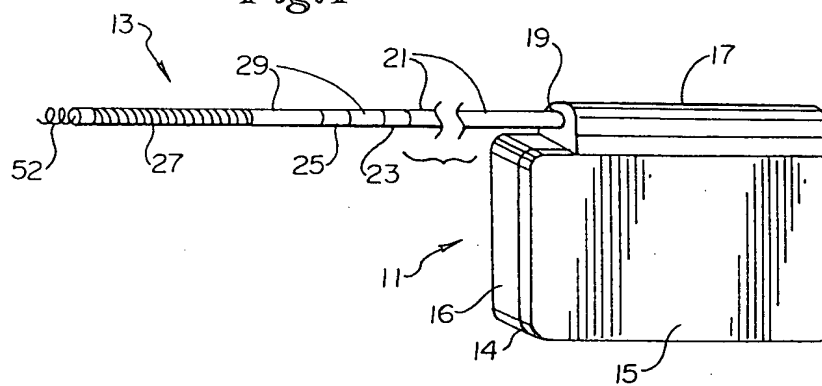


Fig.2

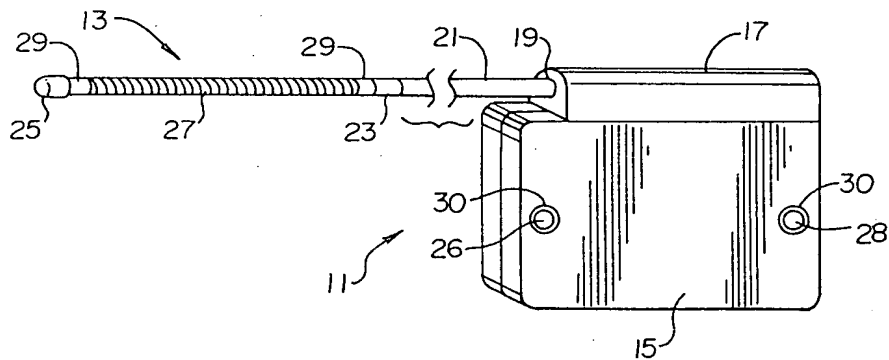


Fig.3

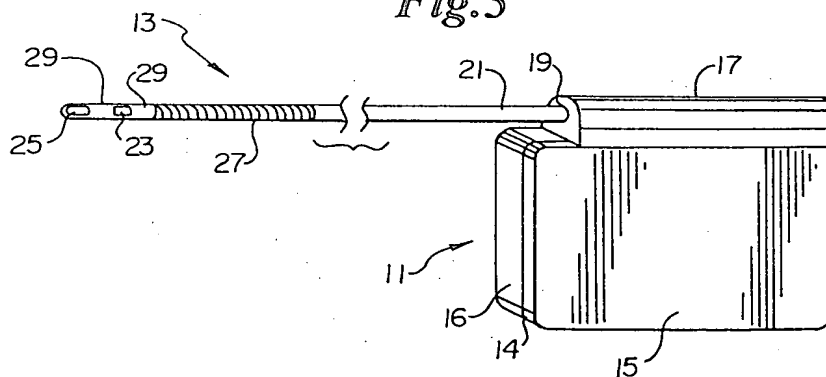




Fig.4

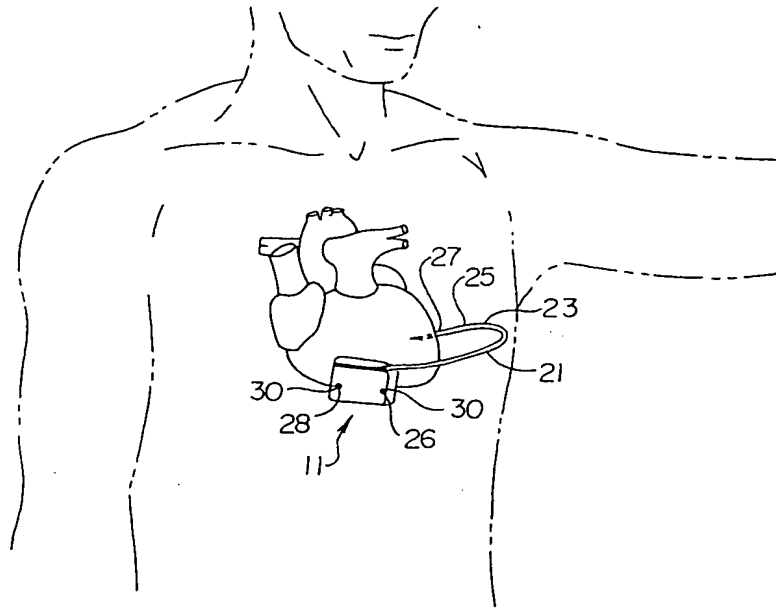
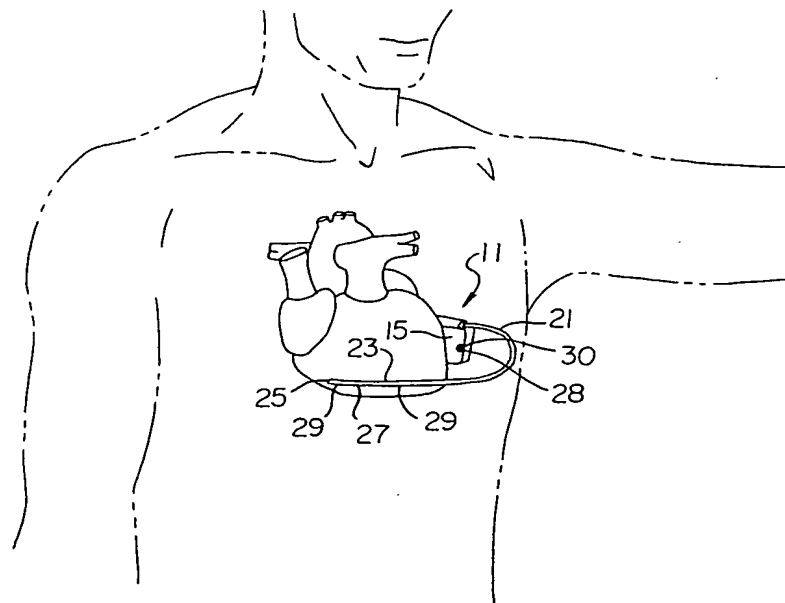


Fig.5



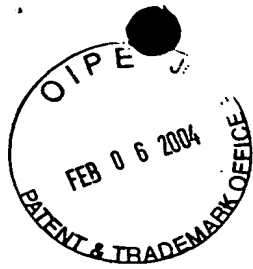


Fig.6

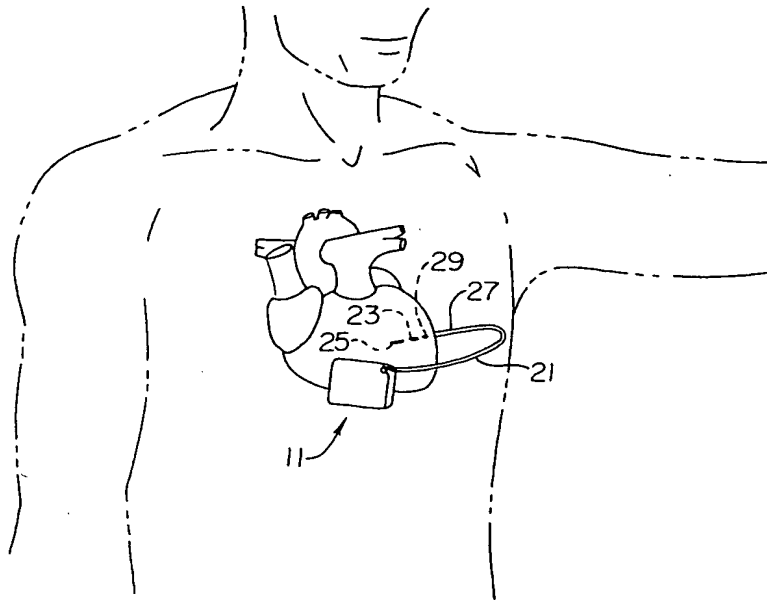
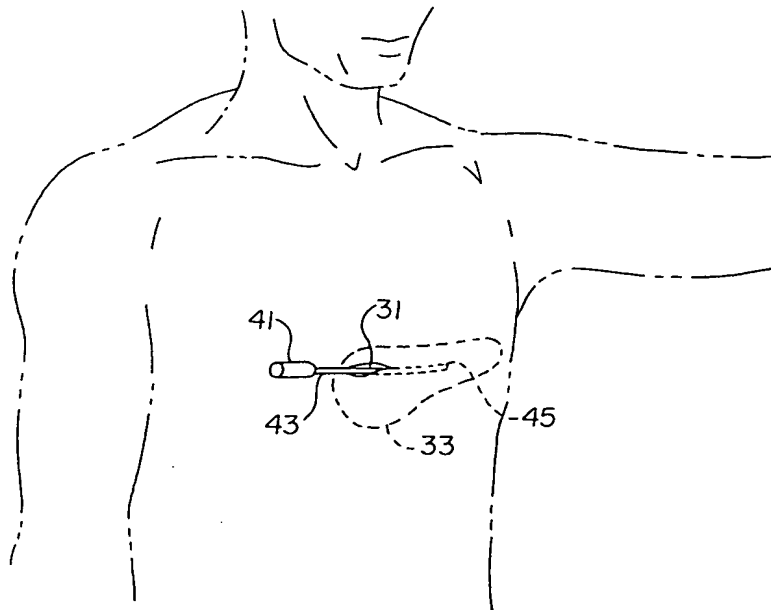


Fig.7



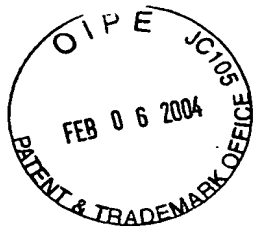


Fig.8

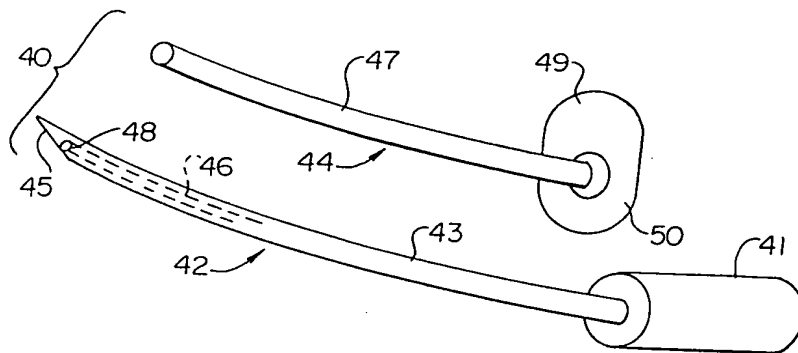
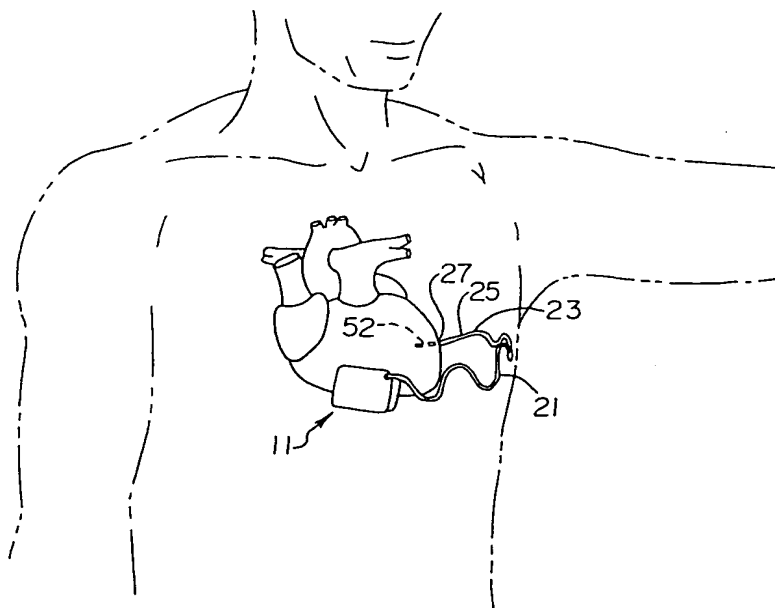


Fig.9



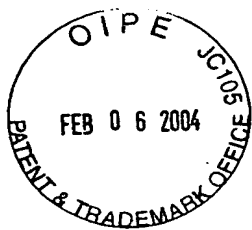


Fig.10

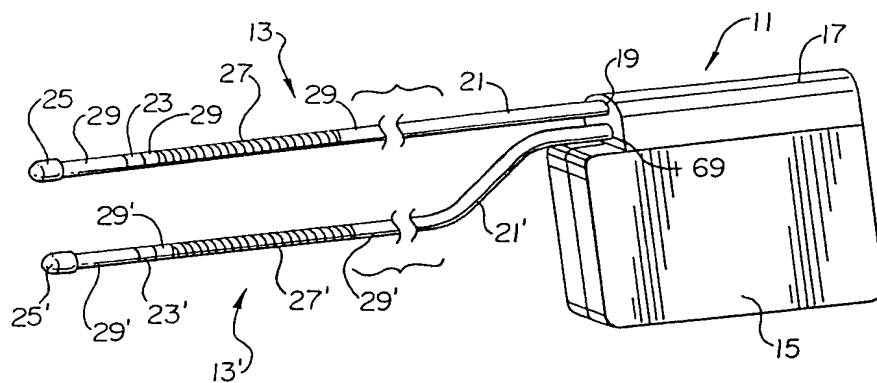


Fig.11

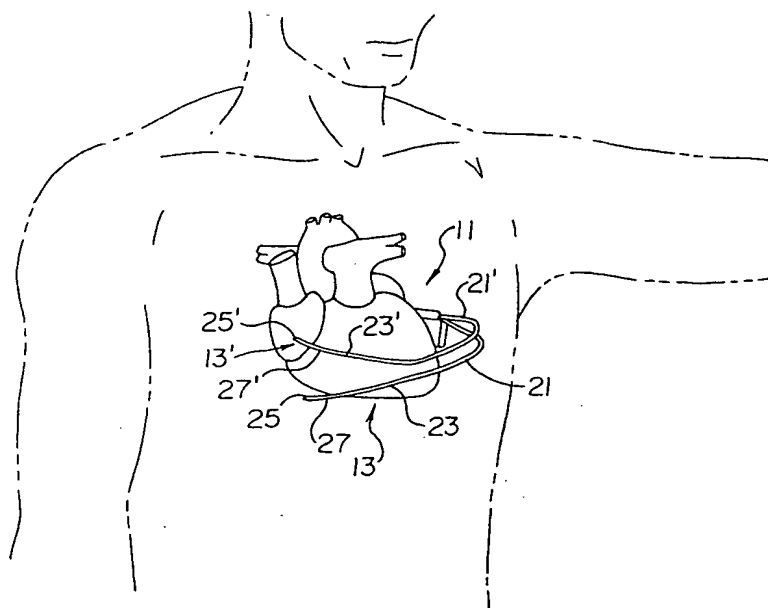


Fig.12

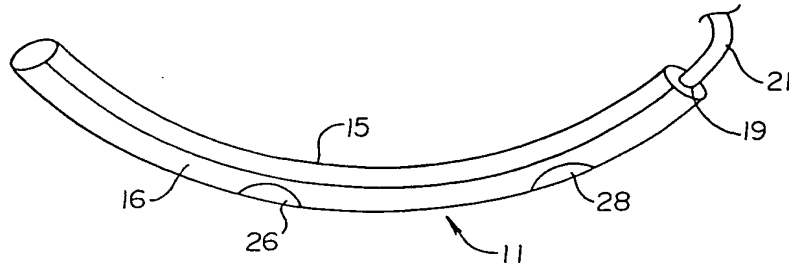


Fig.13

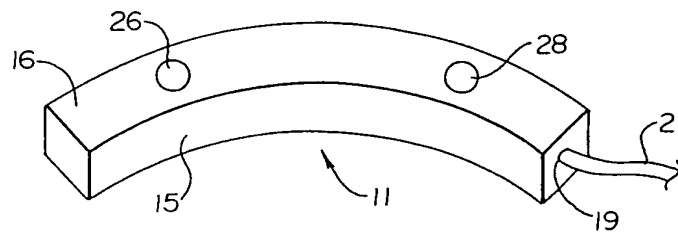


Fig.14

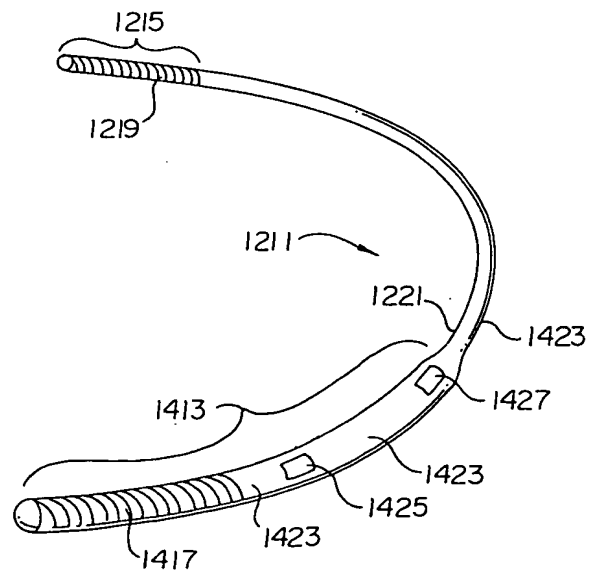




Fig.15

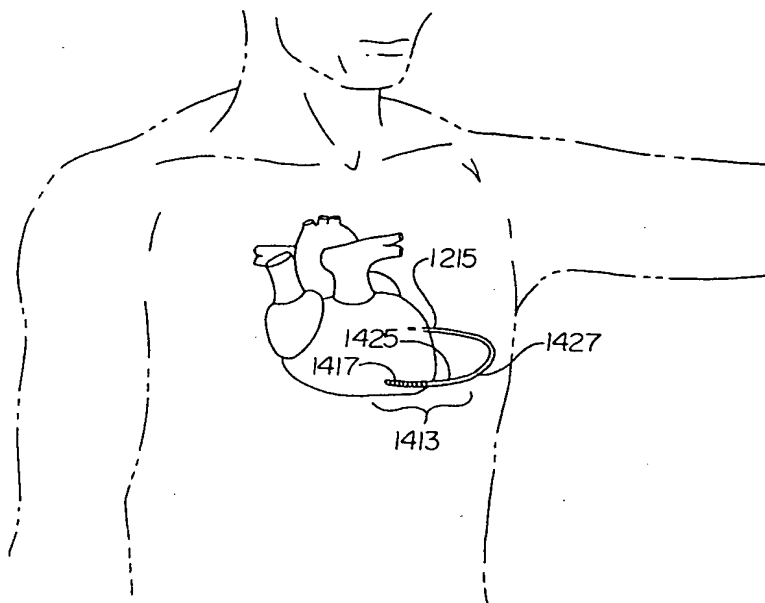


Fig.16

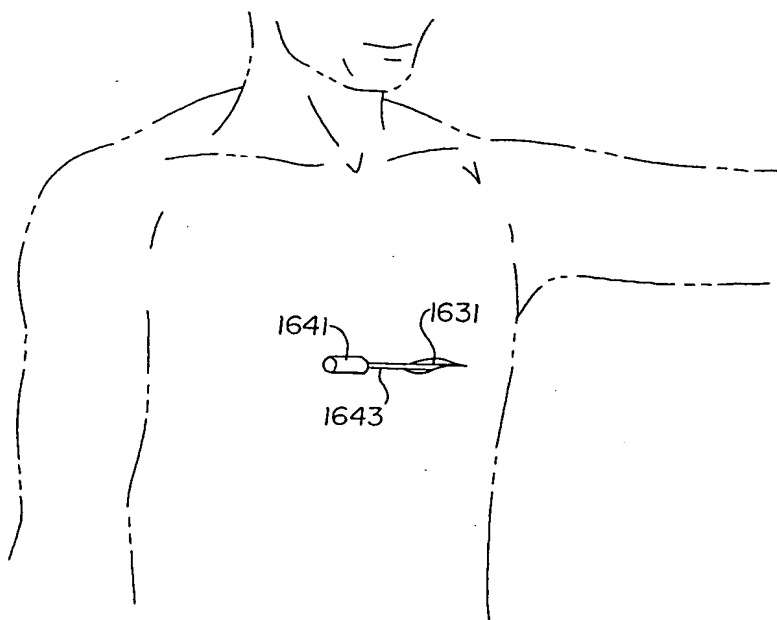




Fig.17

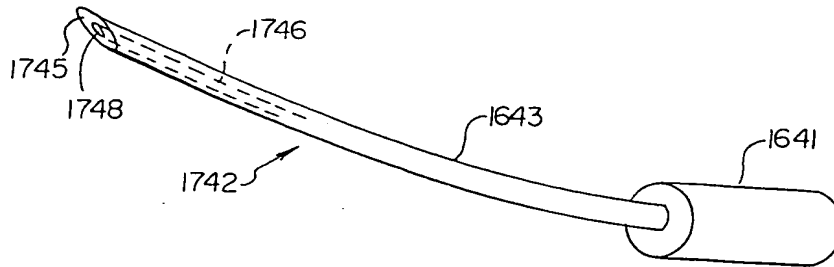


Fig.18

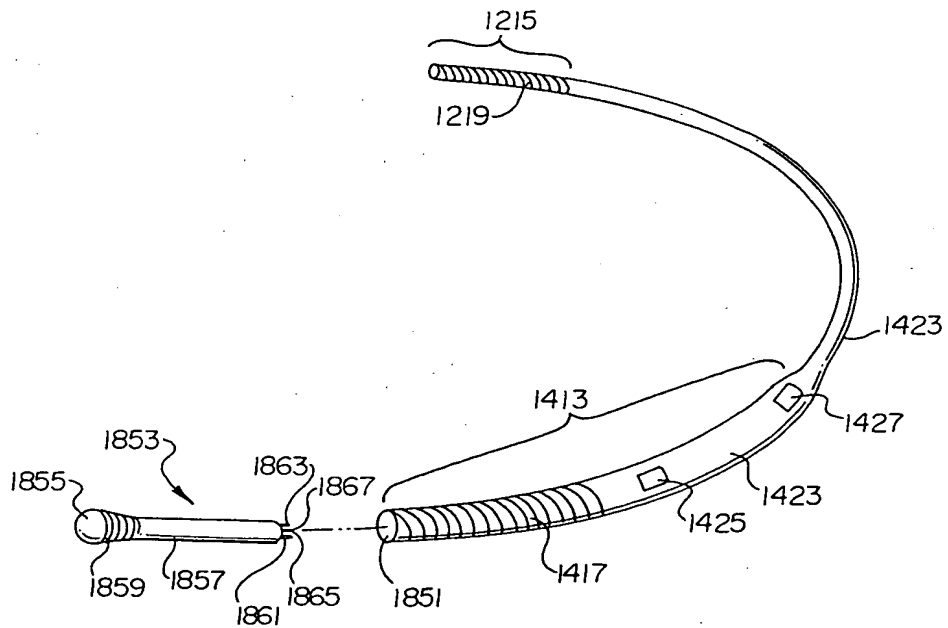




Fig. 19

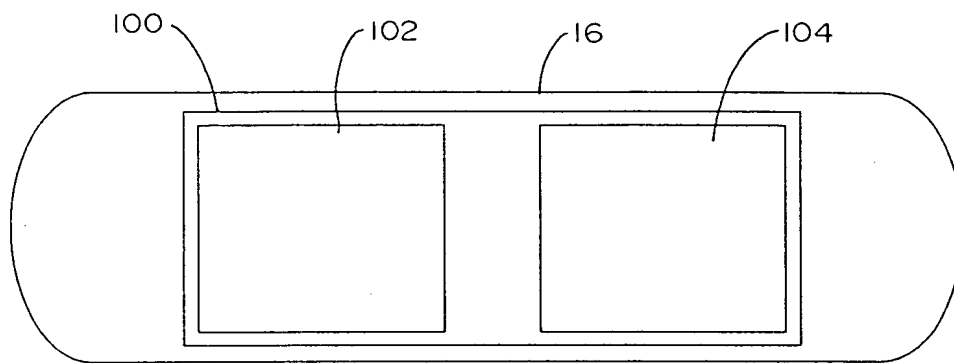
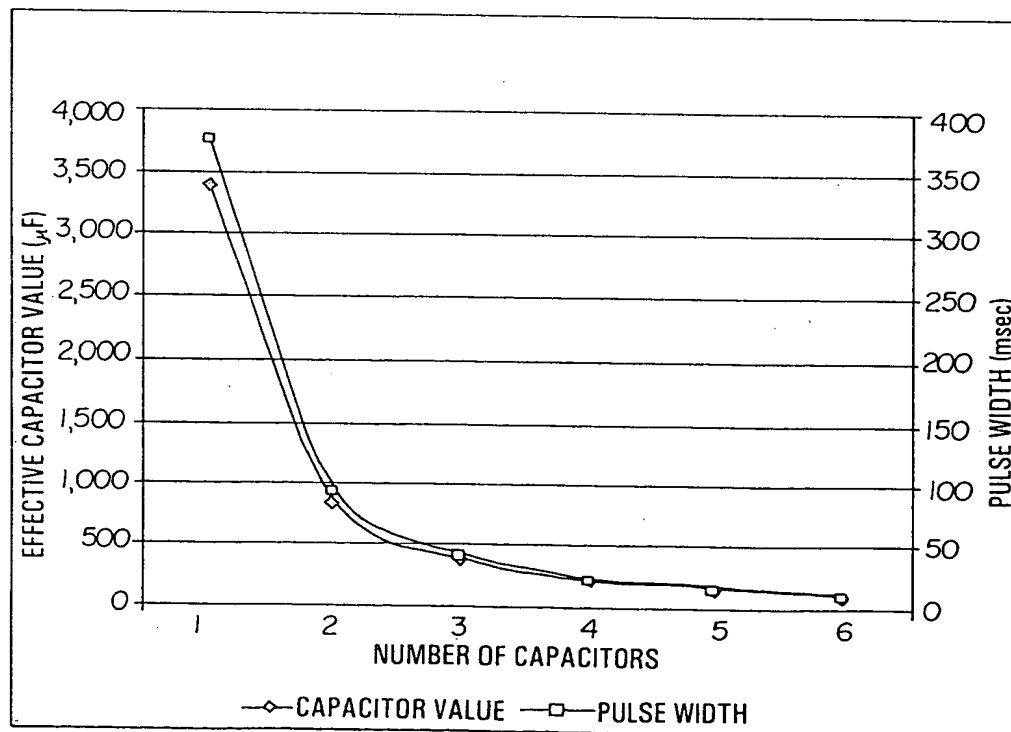




Fig.20

CAPACITORS	EFFECTIVE V	EFFECTIVE C	PULSE WIDTH	INDIV C	TOTAL VOLUME
1	350 V	3380 μ F	377 msec	3380 μ F	27.6 cc's
2	700 V	845 μ F	94 msec	1690 μ F	27.6 cc's
3	1050 V	376 μ F	42 msec	1128 μ F	27.6 cc's
4	1400 V	211 μ F	23 msec	844 μ F	27.6 cc's
5	1750 V	135 μ F	15 msec	675 μ F	27.6 cc's
6	2100 V	94 μ F	10 msec	564 μ F	27.6 cc's

Fig.21



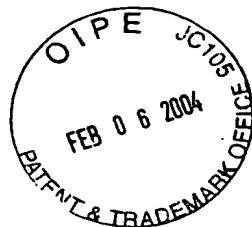


Fig.22

CHARGE TIMES vs. POWER SUPPLY EFFICIENCY, TWO BATTERIES

STORED ENERGY	INVERTER EFFICIENCY	TIME, BOL	TIME, EOL
207 J	65%	25.5 sec	31.8 sec
207 J	70%	23.6 sec	29.6 sec
207 J	75%	22.1 sec	27.6 sec
207 J	80%	20.7 sec	25.8 sec
207 J	85%	19.5 sec	24.3 sec
207 J	90%	18.4 sec	23.0 sec

Fig.23

CHARGE TIME vs. NUMBER OF BATTERIES

ENERGY	NUMBER BATTERIES	EFFICIENCY	TIME, BOL	TIME, EOL	NUMBER BATTERIES	TIME, BOL	TIME, EOL
207 J	3	65%	17.0 sec	21.2 sec	4	12.7 sec	15.9 sec
207 J	3	70%	15.8 sec	19.7 sec	4	11.8 sec	14.8 sec
207 J	3	75%	14.7 sec	18.4 sec	4	11.0 sec	13.8 sec
207 J	3	80%	13.8 sec	17.3 sec	4	10.4 sec	12.9 sec
207 J	3	85%	13.0 sec	16.2 sec	4	9.7 sec	12.2 sec
207 J	3	90%	12.3 sec	15.3 sec	4	9.2 sec	11.5 sec

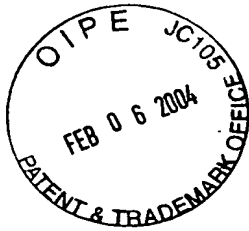


Fig.24

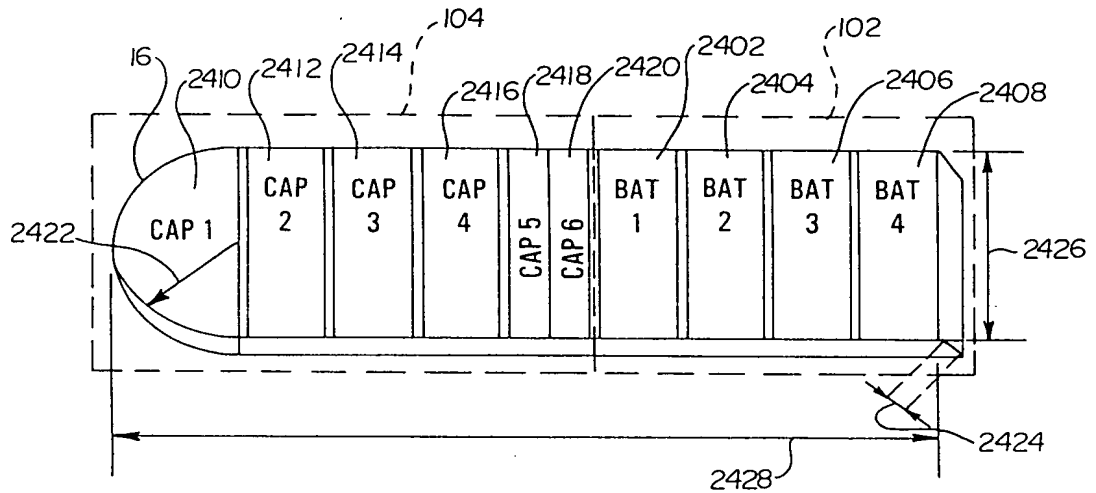
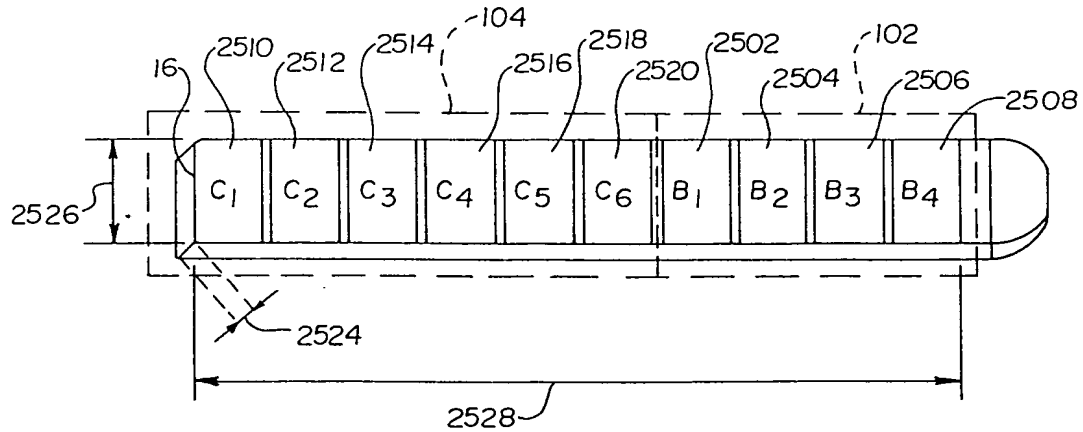


Fig.25



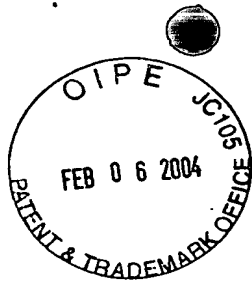


Fig.26

DEVICE WIDTH'S & LENGTH'S vs. THICKNESS

EXAMPLE	THICKNESS	WIDTH	LENGTH	VOLUME
1	0.2 in (0.51 cm)	1.9 in (4.83 cm)	8.0 in (20.32 cm)	50 cc's
2	0.3 in (0.76 cm)	1.5 in (3.81 cm)	6.8 in (17.27 cm)	50 cc's
3	0.4 in (1.02 cm)	1.3 in (3.40 cm)	6.0 in (15.24 cm)	50 cc's
4	0.3 in (0.76 cm)	2.0 in (5.08 cm)	4.6 in (11.76 cm)	50 cc's

Fig.27

VARIATIONS IN CAPACITORS & BATTERIES AT VARIOUS ENERGY LEVELS

ENERGY DELIVERED	ENERGY STORED	EFFECTIVE VOLTAGE	EFFEC CAP VALUE	PULSE WIDTH 60 Ohm	# OF CAP'S	INVERT EFF'Y	WHr PER CHARGE	CHARGE TIME BOL	# OF BATT'S
150 J	207 J	2,100 V	94 μ F	10 msec	6	75%	276	11 sec	4
125 J	172 J	1,750 V	112 μ F	12 msec	5	75%	229	9 sec	4
100 J	137 J	1,750 V	89 μ F	9 msec	5	75%	183	10 sec	3
75 J	103 J	1,400 V	105 μ F	9 msec	4	75%	137	11 sec	2
50 J	69 J	1,050 V	125 μ F	10 msec	3	75%	92	7 sec	2